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A new species of the genus *Pulchellodromus* Wunderlich, 2012 (Aranei: Philodromidae) from Spain

Новый вид рода *Pulchellodromus* Wunderlich, 2012 (Aranei: Philodromidae) из Испании

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КЛЮЧЕВЫЕ СЛОВА: пауки, *Pulchellodromus*, новый вид, описание, Испания.

ABSTRACT. A new species, *Pulchellodromus navarrus* sp.n., from Navarre (Spain) is described. Diagnostic drawings of the new species and its habitat preferences in Spain are provided.

РЕЗЮМЕ. Новый вид *Pulchellodromus navarrus* sp.n., описан из Наварры (Испания). Для нового вида приводится диагностические рисунки и биотопическая приуроченность в Испании.

Introduction

At present, the genus *Pulchellodromus* Wunderlich, 2012 contains 12 species [Kastrygina, Kovblyuk, 2014; WSC, 2016]: *P. afroglaucinus* (Muster et Bosmans, 2007); *P. bistigma* (Simon, 1870); *P. glaucinus* (Simon, 1870); *P. lamellipalpis* (Muster, 2007); *P. mainlingensis* (Hu et Li, 1987); *P. medius* (O. Pickard-Cambridge, 1872); *P. pardalis* (Muster et Bosmans, 2007); *P. pulchellus* (Lucas, 1846); *P. punctiger* (O. Pickard-Cambridge, 1908); *P. ruficapillus* (Simon, 1885); *P. simoni* (Mello-Leitão, 1929) and *P. wunderlichi* (Muster et Thaler, 2007). Most of the *Pulchellodromus* species are known from the Mediterranean Region, except for *P. medius* that extends its range to the Caucasus, *P. ruficapillus* going to western Kazakhstan, and *P. mainlingensis* that is known from Tibet [Kastrygina, Kovblyuk, 2014; WSC, 2016]. Recently, the genus was well described and diagnosed by Muster *et al.* [2007: sub the *pulchellus* species group], Wunderlich [2012] and Kastrygina, Kovblyuk [2014]. All the Mediterranean species were revised by Muster *et al*. [2007]. The aim of this paper is to describe and diagnose a new *Pulchellodromus* species, which has been found in the newly collected spider materials from Navarre, Spain.

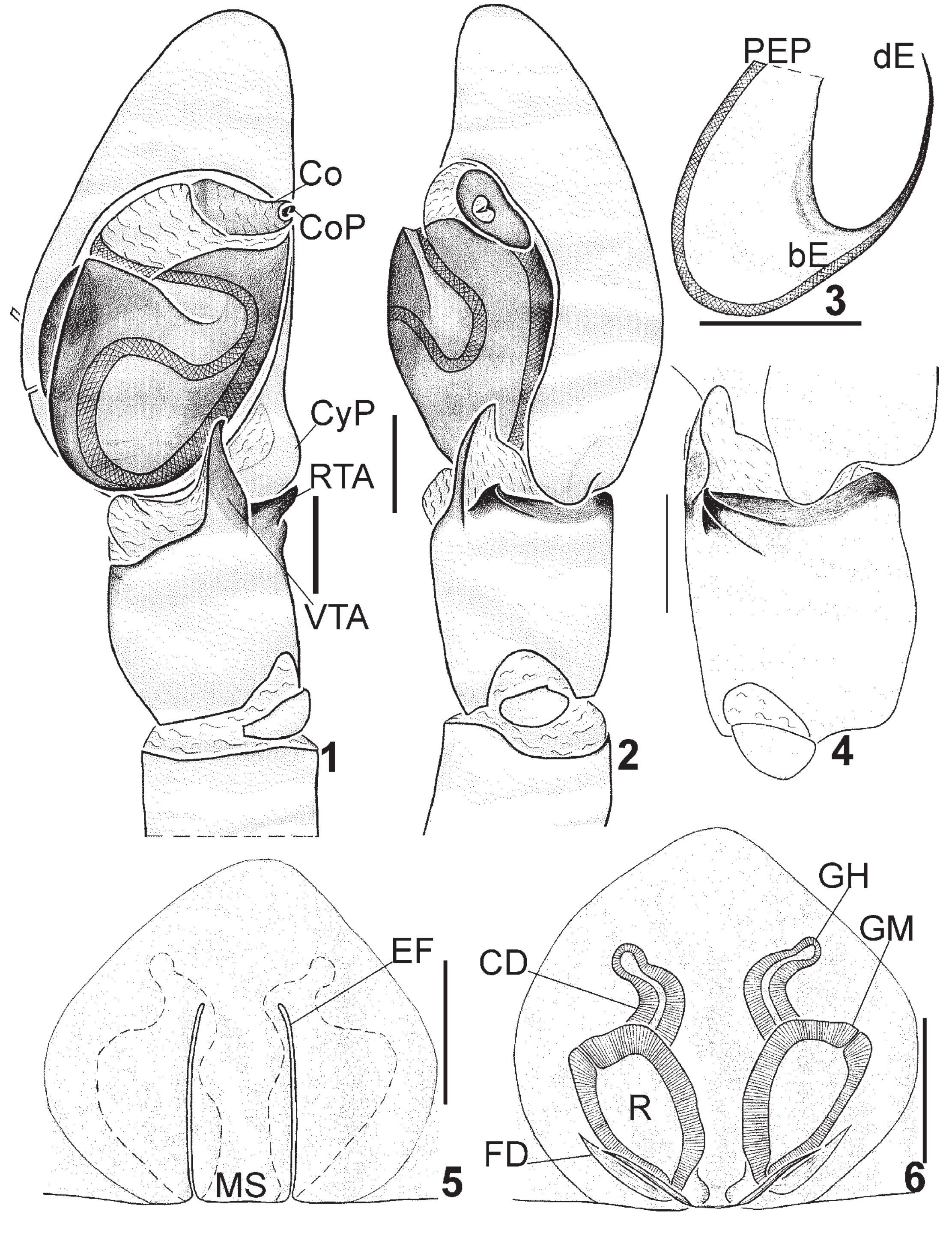
Material and methods

The material was collected during the 7th Field Workshop of the European Dry Grass Group (since 2015, the Eurasian DGG) on 16–23 June 2014 in Navarre, Spain [Biurrun *et al*., 2014].

The holotype and one paratype have been deposited in the Zoological Museum of the Moscow State University, Moscow, curator K.G. Mikhailov (ZMMU). Other paratypes are deposited in the Museum of Nature of the V.N. Karazin Kharkiv National University, Kharkiv, Ukraine, curator I.A. Muravjova (MNKhNU).

Drawings were made under both stereoscopic and brightfield microscopes by using a grid method. Illustrations of the epigynes were made after maceration in a 20% KOH water solution. All scale bars are equal to 0.1 mm.

The terminology follows Muster *et al.* [2007]. Abbreviations used in the figure plates and text are as follows: Pedipalp: *bE* — basal embolus; *Co* — conductor; *CoP* — conductor process; *CyP* — cymbial process; *dE* — distal embolus; *PEP* — paraembolar projection of the embolus; *RTA* — retrolateral tibial apophysis; *VTA* — ventral tibial apophysis. Epigyne-vulva: *CD* — copulatory duct; *EF* — epigynal fold; *FD* — fertilization duct; *GH* — glandular head; *GM* — glandular mound; *MS* — median septum; *R* — receptaculum. Leg spination: a — apical, d — dorsal, p — prolateral, r — retrolateral, v — ventral. Leg segments were measured after their separation from the carapace. The format of measurements follows Muster *et al.* [2007]. All measurements are in millimeters.

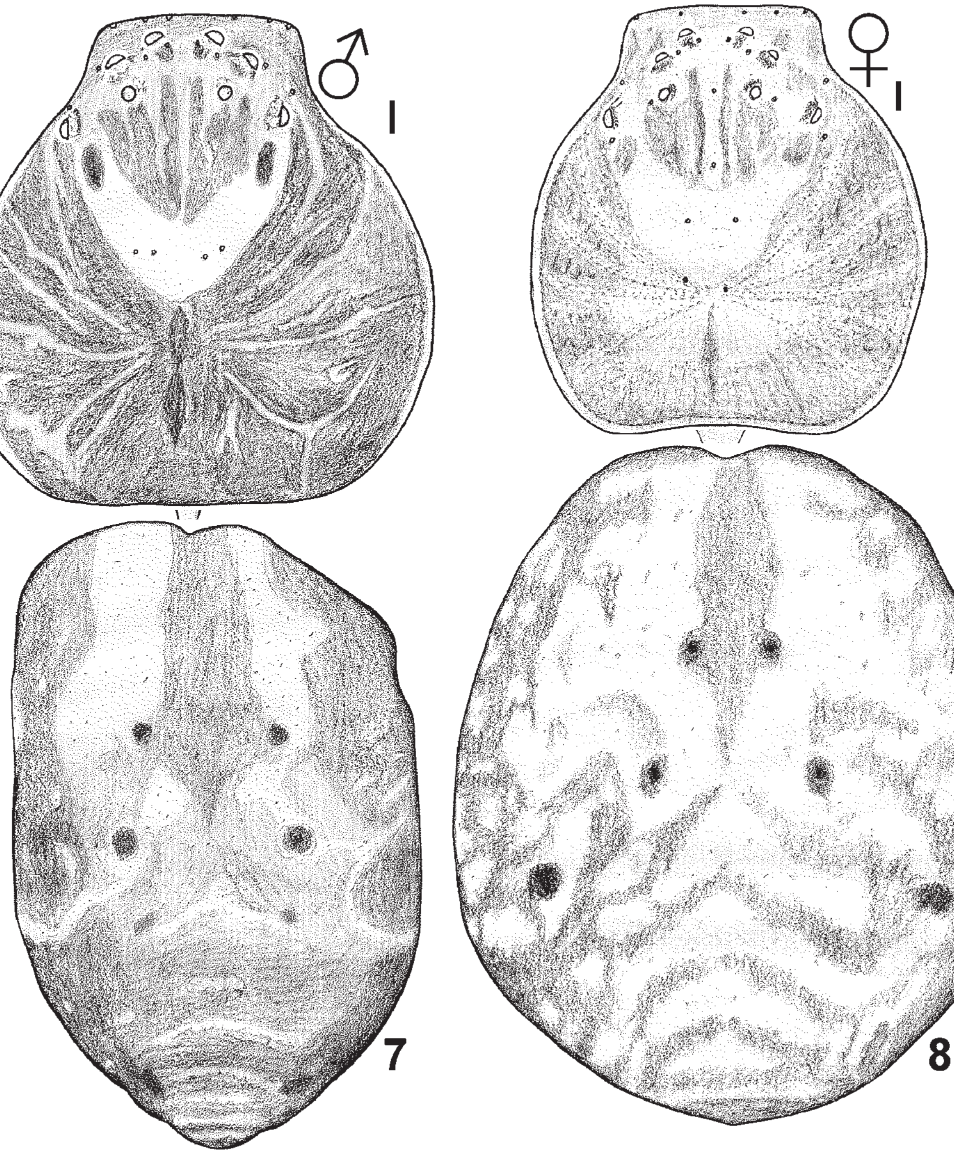


Figs 1–6. Male and female of *Pulchellodromus navarrus* sp.n.: 1 — palp, ventral view; 2 — palp, retrolateral view; 3 — embolus, dorsal view; 4 — tibia, dorso-retrolateral view; 5 — epigyne, ventral view; 6 — epigyne, dorsal view. Scale bars: 0.1 mm.

Abbreviations: *bE* — basal embolus; *CD* — copulatory duct; *Co* — conductor; *CoP* — conductor process; *CyP* — cymbial process; *dE* — distal embolus; *EF* — epigynal fold; *FD* — fertilization duct; *GH* — glandular head; *GM* — glandular mound; *MS* — median septum; *PEP* — paraembolar projection of the embolus; *R* — receptaculum; *RTA* — retrolateral tibial apophysis; *VTA* — ventral tibial apophysis.

Рис 1–6. Самец и самка *Pulchellodromus navarrus* sp.n.: 1 — пальпа вентрально; 2 — пальпа ретролатерально; 3 — эмболюс дорсально; 4 — голень дорсо-ретролатерально; 5 — эпигина, вентрально; 6 — эпигина, дорсально. Масштаб: 0,1 мм.

Обозначения: *bE* — начало (основание) эмболюса; *CD* — копулятивный канал; *Co* — кондуктор; *CoP* — вырост кондуктора; *CyP* — вырост цимбиума; *dE* — дистальная часть эмболюса; *EF* — щель эпигины; *FD* — оплодотворительный канал; *GH* — головковидная железа; *GM* — холмовидная железа; *MS* — медиальная пластинка; *PEP* — проекция эмболюса; *R* — рецептакула; *RTA* — ретролатеральный отросток голени; *VTA* — вентральный отросток голени.



Figs 7–8. Habitusof *Pulchellodromus navarrus* sp.n., dorsal : 7 — male; 8 — female Scale bars: 0.1 mm.
Рис. 7–8. Габитус *Pulchellodromus navarrus* sp.n. дорсально: 7 — самец; 8 — самка. Масштаб: 0,1 мм.

Habitat characteristics are given after Berastegi [2013] and the relevé descriptions performed during the Field Workshop.

Description

Pulchellodromus navarrus **sp.n.**

Figs 1–8.

MATERIAL. Holotype ♂ (ZMMU) from Spain, Navarre, Iza (42°50′27″ N, 1°43′47″ E), 436 m a.s.l., middle 9° slope with the occasionally grazed steppe vegetation, *Brachypodium phoenicoides* community (class *Festuco-Brometea*), 18.06.2014, N.Yu. Polchaninova. – Paratypes: 1 ♀ (ZMMU), together with the holotype; 1 ♂, 1 ♀ (MNKhNU), Lorka (42°39′42″ N, 1°56′37″ E), 533 m a.s.l., eroded 30° slope with the steppe vegetation, abandoned pasture, *Brachypodium retusum* community (class *Festuco-Ononidetea*), 17.06.2014, N.Yu. Polchaninova.

ETYMOLOGY. The specific epithet is a Latin adjective related to the name of Navarre, the Autonomous Community of Spain.

DIAGNOSIS. By the shape of tibial apophyses, the male palp of *P. navarrus* sp.n. is most similar to that of *P. pulchellus* [cf. Muster *et al.*, 2007: figs 7, 29], but can be distinguished by the long and narrow conductor (wide and globular in *P. pulchellus*), and by the presence of conductor process (absent in *P. pulchellus*). The epigyne of *P. navarrus* sp.n. is similar to those of *P. glaucinus* and *P. wunderlichi* [cf. Muster *et al.*, 2007: figs 37–38], but differs in the conformation of the median septum covering about 1/4 part of the re-

ceptaculum (about 1/2 part in *P. glaucinus* and *P. wunderlichi*), and in the receptaculae being more spaced apart from each other than those in *P. glaucinus* and *P. wunderlichi*.

DISTRIBUTION. The type locality only: Iza, Navarre, Spain.

DESCRIPTION. Male (holotype and female paratype from ZMMU). Measurements (♂/♀): total length 3.4/3.8; carapace 1.4/1.4 wide; cymbium length 0.6; femur I 1.5/1.4. Carapace and abdomen light brown, with a distinct pattern (see Figs 7–8). Abdomen with a fir-shaped pattern.

Paratypes (male and female from MNKhNU). Measurements (♂/♀): total length 2.7/3.5; carapace 1.2/1.2 wide and 1.0/1.3 long. Length of legs and spination see in Tables 1–3.

HABITAT. The studied specimens were collected from insolated slopes with the steppe vegetation.

PHENOLOGY. ♂♀ — VI.

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Table 1. Length of leg segments of *Pulchellodromus navarrus* sp.n. (♂/♀).
Таблица 1. Длина сегментов ног *Pulchellodromus navarrus* sp.n. (♂/♀).

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	1.1/1.2	0.5/0.6	0.9/0.9	0.8/0.8	0.6/0.6	3.9/4.1
II	1.2/1.4	0.5/0.6	1.1/1.1	0.9/0.9	0.6/0.6	4.3/4.6
III	1.0/1.2	0.4/0.6	0.8/0.9	0.7/0.7	0.4/0.5	3.3/3.9
IV	1.0/1.2	0.4/0.5	0.8/0.8	0.7/0.8	0.4/0.5	3.3/3.8

Table 2. Male leg spination of *Pulchellodromus navarrus* sp.n.
Таблица 2. Шипование ног самца *Pulchellodromus navarrus* sp.n.

Leg	Femur	Tibia	Metatarsus
I	d 1-1, p 1-1-1	d 1, p 1-1-1, r 1-1-1, v 2-2-2a	p 1-1-1, r 1-1-1, v 2-2
II	d 1-1-1	d 1, p 1-1-1, r 1-1-1, v 2-2-2a	p 1-1-1, r 1-1-1, v 2-2-2a
III	d 1-1	d 1, p 1-1, r 1-1-1, v 2-2-2a	p 1-1-1-1, r 1-1, v 2-2-1-1a
IV	d 1-1	d 1-1, p 1-1, r 1-1, v 2-2-2a	p 1-1-1-1, r 1-1-1-1, v 2-2-1a

Table 3. Female leg spination of *Pulchellodromus navarrus* sp.n.
Таблица 3. Шипование ног самки *Pulchellodromus navarrus* sp.n.

Leg	Femur	Tibia	Metatarsus
I	d 1-1, p 1-1	p 1-1, r 1-1, v 2-2-1a	p 1-1-1, r 1-1-1, v 2-2
II	d 1	p 1-1, r 1-1, v 2-2-1a	p 1-1-1, r 1-1-1, v 2-2
III	d 1-1	p 1-1, r 1-1, v 2-2	p 1-1-1, r 1-1-1, v 2-2-1a
IV	Leg IV is missing		

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